Pro-healing biomaterial for treating lung inflammation associated with COVID-19

Grant Award Details

Pro-healing biomaterial for treating lung inflammation associated with COVID-19

Grant Type: Discovery Research Projects

Grant Number: DISC2COVID19-12007

Project Objective: The objective of this award is to develop a soluble decellularized extracellular matrix that can dampen acute lung inflammation and improve pulmonary function in COVID-19 patients.

Investigator:

Name:	Karen Christman
Institution:	University of California, San Diego
Type:	PI

Disease Focus: COVID-19, Infectious Disease, Respiratory Disorders

Human Stem Cell Use: Adult Stem Cell

Award Value: $221,758

Status: Active

Grant Application Details

Application Title: Pro-healing biomaterial for treating lung inflammation associated with COVID-19

Public Abstract:

Research Objective

Pro-healing biomaterial to treat lung inflammation and promote recovery.

Impact

COVID-19 associated acute respiratory distress syndrome

Major Proposed Activities

- Evaluate biomaterial for ability to reduce lung inflammation in rodent model
- Evaluate biomaterial for ability to recruit stem cells in the lung
- Evaluate biomaterial for ability to improve lung function in rodent model
- Evaluate biomaterial for ability to recruit human stem cells

Statement of Benefit to California:	In late-June 2020, there are more than 5,700 Californians who are currently hospitalized because of COVID-19 (tested positive or suspected) with over 1,300 confirmed COVID-19 patients in the ICU. A significant number of severe cases involve a negative inflammatory response in the lungs leading to respiratory failure. We aim to develop a new therapeutic that can treat this inflammation and promote lung healing thereby having potential benefit to thousands of Californians.

Source URL: https://www.cirm.ca.gov/our-progress/awards/pro-healing-biomaterial-treating-lung-inflammation-associated-covid-19